### **ENVIRONMENTAL CHEMISTS**

Date of Report: May 17, 1994 Date Received: May 11, 1994

Project: 3350 Soil Retest, PO #M34495 Date Samples Extracted: May 12, 1994 Date Extracts Analyzed: May 12, 1994

## RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLE FOR PCB AS AROCHLOR 1254 BY GC/ECD (MODIFIED 8080)

Results Reported as µg/g (ppm)

Sample ID	<u>PCB</u>	Internal Standard (% Recovery)
M34495	<0.1	120%
Quality Assurance		
Blank	<0.1	97%
M34495 (Duplicate)	<0.1	125%
M34495 (Matrix Spike) % Recovery	114%	141%
M34495 (Matrix Spike Duplicate) % Recovery	116%	146%
Spike Blank % Recovery	101%	134%
Spike Level	4	

rRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119 (206) 285-8282

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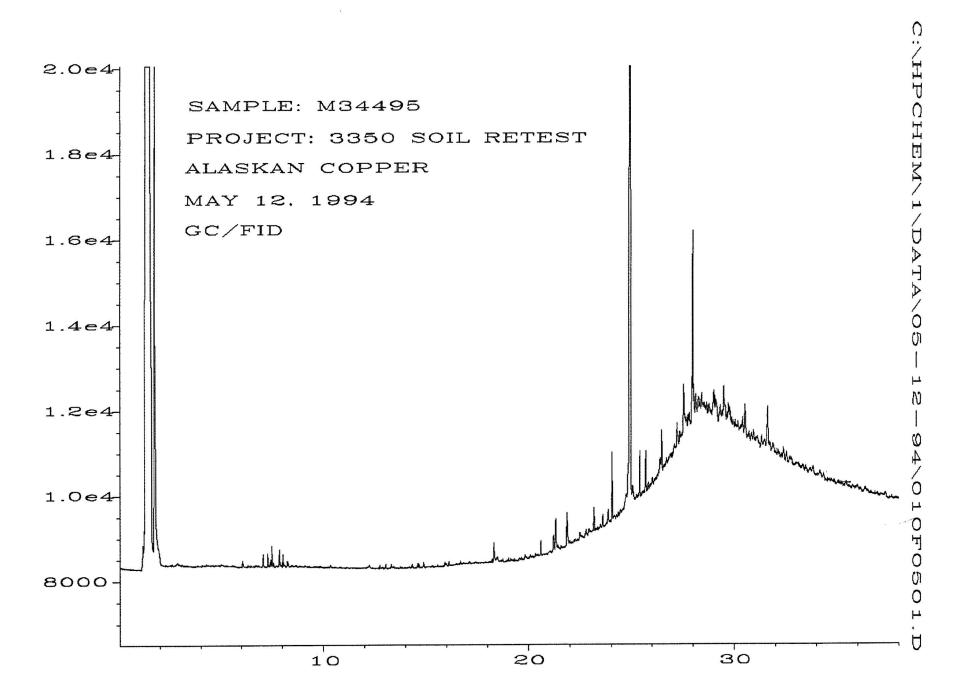
# SAMPLE CHAIN OF CUSTODY

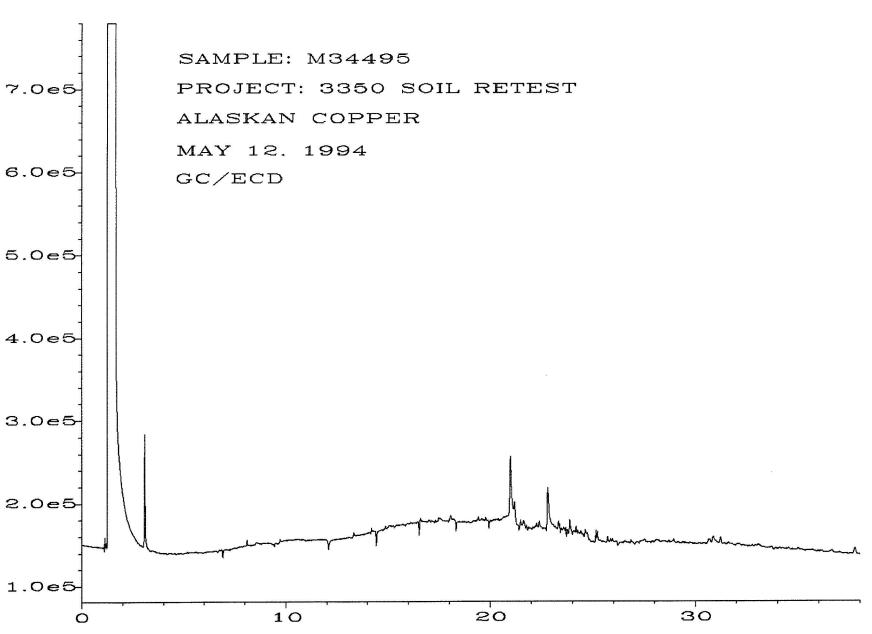
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		3350 Soil	Retes	<b>-</b>	M 34495	
SAMPLERS (signature)					PROJECT LOCATION	_
D. G. G.		<del></del>			3350 Airport way	
REMARKS					SAMPLE DISPOSAL INFORMATION	_,
Sample TAKE	After Z	" of the	5 Sail		Dispose after 30 days	
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#### **ENVIRONMENTAL CHEMISTS**

Andrew John Friedman James E. Bruya, Ph.D. (206) 285-8282

### **DUPLICATE COPY**

3012 16th Avenue West Seattle, WA 98119-2029 FAX: (206) 283-5044

May 17, 1994

#### **INVOICE # 94ACU0517-1**

Alaskan Copper Works 628 South Hanford Seattle, WA 98134

RE: Project 3350 Soil Retest, PO #M34495: Results of testing requested by Gerry Thompson, Project Leader for material submitted on May 11, 1994.

1 soil sample characterized by capillary	
gas chromatography @ \$125 per sample	\$ 125.00
1 soil sample analyzed for Total PCB as	
Arochlor 1254 by GC/ECD @ \$85 per sample	<u>85.00</u>
Amount Due	\$ 210.00

#### **ENVIRONMENTAL CHEMISTS**

Andrew John Friedman James E. Bruya, Ph.D. (206) 285-8282 3012 16th Avenue West Seattle, WA 98119-2029 FAX: (206) 283-5044

May 17, 1994

Gerry Thompson, Project Leader Alaskan Copper Works 628 South Hanford Seattle, WA 98134

Dear Mr. Thompson:

Enclosed are the results from the testing of material submitted on May 11, 1994 from Project 3350 Soil Retest, PO #M34495.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

Bradley T. Benson

Gradles T Benson

Chemist

BTB/dp

**Enclosures** 

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: May 17, 1994 Date Received: May 11, 1994

Project: 3350 Soil Retest, PO #M34495 Date Samples Extracted: May 12, 1994

> RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLE FOR FINGERPRINT CHARACTERIZATION BY CAPILLARY GAS CHROMATOGRAPHY USING A FLAME IONIZATION DETECTOR (FID) AND ELECTRON CAPTURE DETECTOR (ECD)

Sample ID

GC Characterization

M34495

The GC trace using the flame ionization detector (FID) showed the presence of high boiling compounds. The patterns displayed by these peaks are indicative of motor oil or transformer oil. The high boiling compounds appeared as a broad hump eluting from n-C<sub>20</sub> to beyond n-C<sub>35</sub> showing a maximum near n-C<sub>28</sub>.

The large peak seen near 25 minutes on the GC/FID trace is pentacosane, added as a quality assurance check for this GC analysis.